

WHAT IS CLAIMED IS:

1. A method for determining whether a client communication system seeking access to a host communication system is authorized to do so, the method comprising:

5 performing a mathematical computation on an access password and a client-communication-system-specific identifier, and

designating a client communication system as unauthorized based on a result of the mathematical computation.

10 2. The method of claim 1, wherein the mathematical computation comprises a hashing algorithm.

3. The method of claim 1, wherein the mathematical computation is performed when a communication is initiated.

15 4. The method of claim 1, wherein the access password comprises a subscriber password.

20 5. The method of claim 1, wherein the access password comprises a user password.

6. The method of claim 1, wherein the access password comprises an account password.

25 7. The method of claim 1, wherein the client-communication-system-specific identifier varies based on the client communication system.

8. The method of claim 1, wherein the client-communication-system-specific identifier comprises a device-specific identifier.

30 9. The method of claim 8, wherein the device-specific identifier comprises a hard disk identifier.

10. The method of claim 8, wherein the device-specific identifier comprises an Ethernet address.

5 11. The method of claim 8, wherein the device-specific identifier comprises a central processing unit serial number.

12. The method of claim 8, wherein the device-specific identifier comprises a description of the storage characteristics of the hard disk.

10 13. The method of claim 1, further comprising:
retrieving a result of a first mathematical computation performed on the access password and the client-communication-system-specific identifier,
15 retrieving the client-communication-system-specific identifier from the client communication system, and
retrieving a version of the access password located on the host communication system,
wherein:
20 performing the mathematical computation comprises performing the mathematical computation at the host using the retrieved version of the access password located on the host communication system and the client-communication-system-specific identifier retrieved from the client communication system, and
designating the client communication system as unauthorized based on whether
25 the result of the first mathematical computation corresponds to the result of the host-based mathematical computation.

14. The method of claim 13, wherein retrieving the result of the first mathematical computation comprises retrieving the result from the client communication
30 system.

15. The method of claim 13, wherein retrieving the result of the first mathematical computation comprises retrieving the result from the host communication system.

5 16. The method of claim 13, further comprising sending a notification to the client communication system indicating the designation of the client communication system as an unauthorized client communication system if the result of the first mathematical computation does not correspond to the result of the host-based mathematical computation.

10 17. The method of claim 13, further comprising terminating communications from the client communication system if the result of the first mathematical computation does not correspond to result of the host-based mathematical computation.

15 18. The method of claim 17, wherein terminating communications is performed after a predetermined delay if the result of the first mathematical computation does not correspond to the result of the host-based mathematical computation.

20 19. A method for handling information about an authorized client communication system, the method comprising:
storing an access password,
performing a mathematical computation on the access password and a client-communication-system-specific identifier, and
storing a result of the mathematical computation.

25 20. The method of claim 19, wherein:
storing the result of the mathematical computation comprises storing the result on the client communication system,
performing the mathematical computation comprises performing the
30 mathematical computation at the client communication system, and

storing the access password comprises storing the access password on the host communication system.

21. The method of claim 19, wherein:

5 storing the result of the mathematical computation comprises storing the result on the host communications system,

performing the mathematical computation comprises performing the mathematical computation at the host communication system, and

10 storing the access password comprises storing the access password on the host communication system.

22. The method of claim 19, wherein the mathematical computation comprises a hashing algorithm.

15 23. The method of claim 19, wherein the access password comprises a subscriber password.

24. The method of claim 19, wherein the access password comprises a user password.

20 25. The method of claim 19, wherein the access password comprises an account password.

26. The method of claim 19, wherein the client-communication-system-specific identifier varies based on the client communication system.

27. The method of claim 19, wherein the client-communication-system-specific identifier comprises a device-specific identifier.

30 28. The method of claim 27, wherein the device-specific identifier comprises a hard disk identifier.

29. The method of claim 27, wherein the device-specific identifier comprises an Ethernet address.

5 30. The method of claim 27, wherein the device-specific identifier comprises a central processing unit serial number.

31. The method of claim 27, wherein the device-specific identifier comprises a description of the storage characteristics of the hard disk.

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32. A computer readable medium or propagated signal having embodied thereon a computer program for identifying an unauthorized client communication system seeking access to a host communication system, the computer program comprising:

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a performing code segment for performing a mathematical computation on an access password and a client-communication-system-specific identifier, and
a designating code segment for designating a client communication system as unauthorized based on a result of the mathematical computation.

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33. The medium of claim 32, wherein the mathematical computation comprises a hashing algorithm.

34. The medium of claim 32, wherein the performing code segment performs the mathematical computation when a communication is initiated.

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35. The medium of claim 32, wherein the access password comprises a subscriber password.

36. The medium of claim 32, wherein the access password comprises a user
30 password.

37. The medium of claim 32, wherein the access password comprises an account password.

38. The medium of claim 32, wherein the client-communication-system-specific identifier varies based on the client communication system.

39. The medium of claim 32, wherein the client-communication-system-specific identifier comprises a device-specific identifier.

40. The medium of claim 39, wherein the device-specific identifier comprises a hard disk identifier.

41. The medium of claim 39, wherein the device-specific identifier comprises an Ethernet address.

42. The medium of claim 39, wherein the device-specific identifier comprises a central processing unit serial number.

43. The medium of claim 39, wherein the device-specific identifier comprises a description of the storage characteristics of the hard disk.

44. The medium of claim 32, further comprising:
a first computation result code segment for retrieving a result of a first mathematical computation performed on the access password and the client-communication-system-specific identifier,
a first retrieving code segment for retrieving the client-communication-system-specific identifier, and
a second retrieving code segment for retrieving a version of the access password located on the host communication system,
wherein:

the performing code segment comprises a code segment for performing the computation at the host using the retrieved version of the access password located on the host communication system and the client-communication-system-specific identifier retrieved from the client communication system, and

the designating code segment comprises a code segment for designating the client communication system as unauthorized based on whether the result of the first mathematical computation corresponds to the result of the host-based mathematical computation.

45. The medium of claim 44, wherein the first computation result code segment comprises a code segment for retrieving the result from the client communication system.

46. The medium of claim 44, wherein the first computation result code segment comprises a code segment for retrieving the result from the host communication system.

47. The medium of claim 44, further comprising a notification code segment for sending a notification to the client communication system indicating the designation of the client communication system as an unauthorized client communication system if the result of the first mathematical computation does not correspond to the result of the host-based mathematical computation.

48. The medium of claim 44, further comprising a terminating code segment for terminating communications from the client communication system if the result of the first mathematical computation does not correspond to result of the host-based mathematical computation.

49. The medium of claim 48, wherein the terminating code segment terminates communications after a predetermined delay if the result of the first

mathematical computation does not correspond to the result of the host-based mathematical computation.

50. A computer readable medium or propagated signal having embodied thereon a computer program for handling information about an authorized client communication system, the computer program comprising:

- an access password storing code segment for storing an access password,
- a performing code segment for performing a mathematical computation on the access password and a client-communication-system-specific identifier, and
- a computation storing code segment for storing a result of the mathematical computation.

51. The medium of claim 50, wherein the performing code segment includes:

- a computation storing code segment for storing the result of the mathematical computation comprises storing the result on the client communication system,
- a performing code for performing the mathematical computation comprises performing the mathematical computation at the client communication system, and
- an access password storing code segment to store the access password comprises storing the result on the host communication system.

52. The medium of claim 50, wherein:

- a computation storing code segment for storing the result of the mathematical computation comprises storing the result on the host communication system,
- a performing code for performing the mathematical computation comprises performing the mathematical computation at the host communication system, and
- storing the access password comprises storing the access password on the host communication system.

53. The medium of claim 50, wherein the mathematical computation comprises a hashing algorithm.

54. The medium of claim 50, wherein the access password comprises a subscriber password.

5 55. The medium of claim 50, wherein the access password comprises a user password.

56. The medium of claim 50, wherein the access password comprises an account password.

10 57. The medium of claim 50, wherein the client-communication-system-specific identifier varies based on the client communication system.

15 58. The medium of claim 50,, wherein the client communication system-specific identifier comprises a device-specific identifier.

59. The medium of claim 58, wherein the device-specific identifier comprises a hard disk identifier.

20 60. The medium of claim 58, wherein the device-specific identifier comprises an Ethernet address.

61. The medium of claim 58, wherein the device-specific identifier comprises a central processing unit serial number.

25 62. The medium of claim 58, wherein the device-specific identifier comprises a description of the storage characteristics of the hard disk.

63. An apparatus for identifying an unauthorized client communication system seeking access to a host communication system, the apparatus comprising:

a performing device structured and arranged to perform a mathematical computation on an access password and a client-communication-system-specific identifier, and

5 a designating device structured and arranged to designate a client communication system as unauthorized based on a result of the mathematical computation.

64. The apparatus of claim 63, wherein the mathematical computation comprises a hashing algorithm.

10 65. The apparatus of claim 63, wherein the mathematical computation is performed when a communication is initiated.

15 66. The apparatus of claim 63, wherein the access password comprises a subscriber password.

67. The apparatus of claim 63, wherein the access password comprises a user password.

20 68. The apparatus of claim 63, wherein the access password comprises an account password.

69. The apparatus of claim 63, wherein the client-communication-system-specific identifier varies based on the client communication system.

25 70. The apparatus of claim 63, wherein the client-communication-system-specific identifier comprises a device-specific identifier.

71. The apparatus of claim 70, wherein the device-specific identifier comprises a hard disk identifier.

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72. The apparatus of claim 70, wherein the device-specific identifier comprises an Ethernet address.

73. The apparatus of claim 70, wherein the device-specific identifier
5 comprises a central processing unit serial number.

74. The apparatus of claim 70, wherein the device-specific identifier comprises a description of the storage characteristics of the hard disk.

10 75. The apparatus of claim 63, the apparatus further comprising:
a first computation result device structured and arranged to retrieve a result of a
first mathematical computation performed on the access password and the client-
communication-system-specific identifier,
a retrieving device structured and arranged to retrieve the client-communication-
15 system-specific identifier from the client communication system, and
a device structured and arranged to retrieve a version of the access password
located on the host communication system,
wherein:
the performing device comprises a device for performing the mathematical
20 computation at the host using the retrieved version of the access password located on the
host communication system and the client-communication-system-specific identifier, and
the designating device comprises a device for designating the client
communication system as unauthorized based on whether the result of the first
mathematical computation corresponds to the result of the host-based mathematical
25 computation.

76. The apparatus of claim 75, wherein retrieving the first mathematical
computation result comprises a device for retrieving the result of the first mathematical
computation from the client communication system.

77. The apparatus of claim 75, wherein retrieving the first mathematical computation result comprises retrieving the result of the first mathematical computation from the host communication system.

5 78. The apparatus of claim 66, further comprising a device structured and arranged to terminate communications from the client communication system if the result of the first mathematical computation does not correspond to result of the host-based mathematical computation.

10 79. An apparatus for handling information about an authorized client communication system, the apparatus comprising:

an access password device structured and arranged to store an access password,
a performing device structured and arranged to perform a mathematical computation on the access password and a client-communication-system-specific

15 identifier, and

a computation storing device structured and arranged to store a result of the mathematical computation.

80. The apparatus of claim 79, wherein the performing device includes:

20 a device for storing the result of the mathematical computation comprises storing the result on the client communication system,

a performing device for performing a mathematical computation comprises performing the mathematical computation at the client communication system, and

25 an access password storing device for storing the access password comprises storing the result on the host communication system.

81. The apparatus of claim 79, wherein:

a computation storing device for storing the result of the mathematical computation comprises storing the result on the host communications system,

30 a performing device for performing the mathematical comprises performing the mathematical computation at the host communication system, and

an access password device storing the access password comprises storing the access password on the host communication system.

82. The apparatus of claim 79, wherein the computation storing device
5 comprises a device structured and arranged to store the result on the client communication system.

83. The apparatus of claim 79, wherein the mathematical computation
10 comprises a hashing algorithm.

84. The apparatus of claim 79, wherein the access password comprises a
subscriber password.

85. The apparatus of claim 79, wherein the access password comprises a user
15 password.

86. The apparatus of claim 79, wherein the access password comprises an
account password.

87. The apparatus of claim 79, wherein the client-communication-system-
20 specific identifier varies based on the client communication system.

88. The apparatus of claim 79, wherein the client-communication-system-
specific identifier comprises a device-specific identifier.

89. The apparatus of claim 88, wherein the device-specific identifier
25 comprises a hard disk identifier.

90. The apparatus of claim 88, wherein the device-specific identifier
30 comprises an Ethernet address.

91. The apparatus of claim 88, wherein the device-specific identifier comprises a central processing unit serial number.

92. The apparatus of claim 88, wherein the device-specific identifier
5 comprises a description of the storage characteristics of the hard disk.